

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P936722

Luminaire Tested: SQ4-FB-050U-075D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

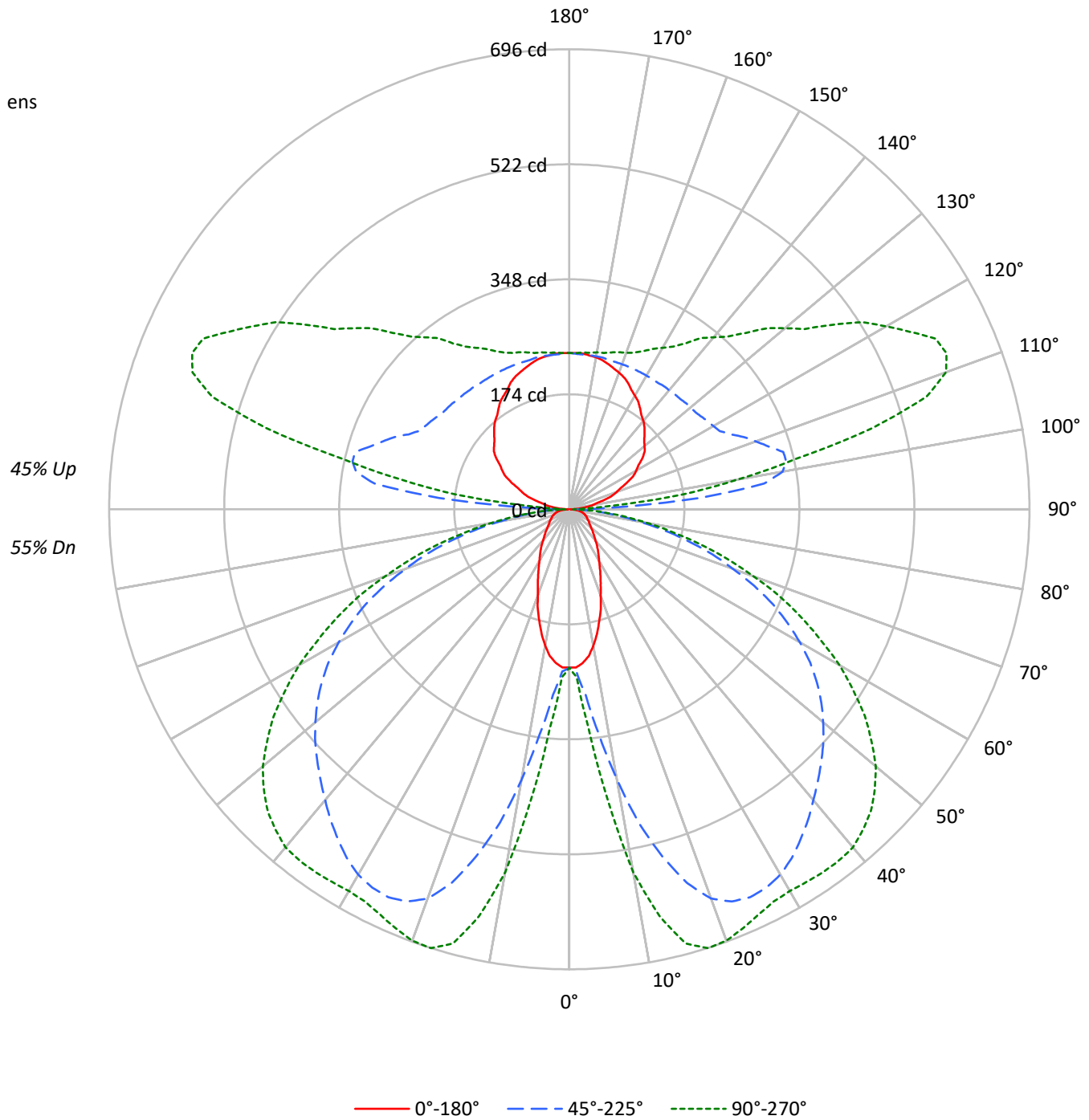
Test Method: LM-79-2019  
Report Number: P936722  
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3386.4 lumens  
Efficiency: N/A  
Efficacy: 93.0 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 36.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2222	2222	2222
5°	2168	2566	2987
10°	1964	3738	4952
15°	1668	4880	5979
20°	1356	5652	6093
25°	1129	5910	5970
30°	952	5942	5958
35°	841	5839	6113
40°	731	5706	6272
45°	661	5607	6297
50°	604	5517	6192
55°	578	5388	5917
60°	589	5144	5484
65°	611	4777	4889
70°	645	4157	4129
75°	708	3380	3223
80°	758	2337	2171
85°	638	1233	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.0	0.9
10°-20°	137.3	4.1
20°-30°	240.1	7.1
30°-40°	309.1	9.1
40°-50°	345.3	10.2
50°-60°	330.7	9.8
60°-70°	262.1	7.7
70°-80°	154.1	4.6
80°-90°	43.7	1.3
90°-100°	115.3	3.4
100°-110°	303.0	8.9
110°-120°	314.2	9.3
120°-130°	252.0	7.4
130°-140°	197.8	5.8
140°-150°	151.8	4.5
150°-160°	109.3	3.2
160°-170°	66.9	2.0
170°-180°	22.6	0.7
0°-30°	408.4	12.1
0°-40°	717.5	21.2
0°-60°	1393.5	41.2
0°-90°	1853.4	54.7
90°-120°	732.5	21.6
90°-150°	1334.1	39.4
90°-180°	1533.0	45.3
0°-180°	3386.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	233	250	282	319	330	22
15°	175	323	544	659	680	49
25°	112	366	648	676	677	51
35°	76	350	610	644	670	47
45°	52	279	539	618	645	40
55°	37	177	457	531	546	34
65°	29	94	340	382	387	29
75°	22	58	186	205	206	23
85°	8	18	46	51	52	8
90°	2	4	12	6	6	2
95°	15	60	198	102	70	17
105°	55	83	335	509	475	58
115°	97	118	268	535	611	96
125°	135	151	244	412	487	120
135°	161	177	236	333	378	124
145°	186	198	234	284	306	117
155°	211	217	234	256	264	97
165°	228	230	234	243	246	64
175°	236	236	235	238	238	22
180°	236	236	236	236	236	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	239.5	239.5	241.0	241.8	243.3	244.1	245.6	247.2	251.8	252.6	254.1
5°	233.3	236.4	246.4	250.2	261.0	275.7	281.8	291.8	312.6	318.8	322.6
7.5°	224.1	231.0	255.6	261.8	288.8	327.2	343.4	365.0	398.1	414.3	427.4
10°	209.4	224.1	268.0	282.6	326.5	385.0	415.0	445.1	495.1	517.4	525.9
12.5°	193.3	217.1	281.0	301.1	364.2	449.7	485.9	519.0	576.0	606.0	610.6
15°	174.8	207.1	293.4	322.6	404.2	503.6	543.6	584.4	637.6	659.1	664.5
17.5°	158.6	199.4	304.9	335.7	435.0	552.1	592.9	626.8	669.9	684.5	688.4
20°	138.6	187.1	312.6	352.7	467.4	587.5	626.8	653.0	682.2	691.5	693.0
22.5°	124.0	174.0	317.2	358.8	489.0	609.1	642.2	663.0	683.0	686.1	686.8
25°	111.6	159.4	316.5	365.8	507.4	622.2	647.6	663.0	674.5	676.1	676.1
27.5°	100.1	143.2	313.4	367.3	521.3	625.2	645.3	656.0	661.4	664.5	664.5
30°	90.1	127.8	305.7	364.2	527.4	622.2	638.3	643.7	649.1	653.7	656.0
32.5°	82.4	113.2	294.1	358.0	528.2	614.5	626.0	629.1	636.8	647.6	651.4
35°	75.5	98.6	281.0	349.6	523.6	602.1	609.8	612.9	628.3	644.5	649.9
37.5°	68.5	87.8	264.1	335.0	516.7	587.5	592.9	598.3	622.2	641.4	647.6
40°	61.6	78.5	244.1	318.8	505.9	569.8	574.4	582.9	614.5	636.8	643.0
42.5°	56.2	70.8	222.5	301.8	492.0	549.8	556.7	569.0	605.2	629.1	636.0
45°	51.6	63.1	199.4	278.7	474.3	529.0	539.0	555.9	594.4	617.5	623.7
47.5°	47.0	57.8	175.6	254.9	455.1	508.2	521.3	540.5	579.8	602.1	607.5
50°	43.1	52.4	151.7	229.5	434.3	485.9	501.3	521.3	561.3	582.1	589.1
52.5°	40.0	47.7	129.4	204.0	410.4	462.8	480.5	501.3	539.0	559.0	563.6
55°	37.0	43.9	110.1	177.1	385.8	438.1	457.4	477.4	514.4	531.3	534.4
57.5°	35.4	40.8	93.9	151.7	359.6	410.4	432.0	450.4	485.1	498.2	501.3
60°	33.1	38.5	81.6	130.1	331.1	384.2	402.7	421.2	450.4	461.2	463.5
62.5°	30.8	37.0	72.4	109.3	301.8	353.4	371.9	388.8	413.5	421.2	424.3
65°	29.3	35.4	65.4	93.9	271.8	321.1	339.6	354.2	374.2	381.9	383.5
67.5°	27.7	33.9	60.1	80.9	241.8	288.8	302.6	316.5	331.9	339.6	340.3
70°	25.4	32.3	55.4	71.6	211.0	251.8	263.3	278.0	290.3	294.1	296.4
72.5°	23.9	30.0	52.4	64.7	179.4	216.4	227.2	235.6	246.4	250.2	250.2
75°	21.6	27.0	49.3	57.8	147.1	177.1	186.3	194.8	203.3	204.8	202.5
77.5°	19.2	23.9	42.4	48.5	114.7	140.1	147.8	152.5	159.4	160.9	161.7
80°	16.2	20.8	33.1	37.7	83.2	103.2	108.6	112.4	118.6	118.6	120.1
82.5°	12.3	16.2	23.9	27.0	56.2	70.8	75.5	77.8	81.6	81.6	81.6
85°	7.7	10.0	15.4	17.7	33.9	43.1	46.2	47.0	50.1	50.8	50.8
87.5°	3.8	5.4	10.0	10.8	17.7	22.3	22.3	23.9	23.9	23.1	22.3
90°	1.6	2.8	4.2	4.5	7.0	10.4	12.1	10.7	8.0	6.0	6.0
92.5°	6.3	17.1	28.0	30.6	43.0	59.6	67.9	59.5	42.7	30.2	29.0
95°	15.2	35.0	54.7	59.7	106.0	167.6	198.5	177.1	134.4	102.3	98.7
97.5°	26.3	43.7	61.1	65.5	142.7	245.6	297.1	283.6	256.6	236.3	229.4
100°	34.9	50.7	66.5	70.5	156.1	270.3	327.4	328.4	330.4	331.9	323.6
102.5°	42.2	57.0	71.7	75.4	162.2	278.0	336.0	353.2	387.6	413.4	406.3
105°	54.6	67.1	79.5	82.7	166.8	279.0	335.0	373.6	450.8	508.7	504.9
107.5°	67.3	78.9	90.6	93.5	167.6	266.6	316.0	369.8	477.5	558.2	559.1
110°	75.8	86.3	96.9	99.5	166.4	255.6	300.1	360.3	480.6	570.9	574.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	84.2	94.2	104.3	106.8	166.4	245.9	285.7	347.3	470.4	562.8	568.9
115°	96.9	106.2	115.4	117.7	167.9	234.8	268.3	327.6	446.3	535.3	543.7
117.5°	109.5	117.9	126.3	128.4	171.1	228.0	256.5	310.0	417.0	497.3	506.7
120°	116.8	124.7	132.6	134.6	173.6	225.7	251.7	300.6	398.5	471.9	480.9
122.5°	124.0	132.0	139.9	141.9	177.3	224.5	248.0	292.1	380.2	446.3	455.2
125°	134.9	142.1	149.4	151.2	182.2	223.5	244.1	281.5	356.4	412.5	420.7
127.5°	143.8	151.2	158.5	160.3	187.1	222.9	240.8	272.9	337.1	385.3	392.2
130°	148.5	156.5	164.3	166.3	190.7	223.2	239.5	268.1	325.3	368.2	374.6
132.5°	153.5	161.4	169.2	171.2	193.7	223.5	238.4	264.0	315.2	353.6	359.4
135°	160.8	167.9	175.2	176.9	196.8	223.2	236.5	257.9	300.8	332.9	337.9
137.5°	168.2	175.3	182.5	184.3	201.6	224.6	236.2	254.3	290.5	317.7	321.8
140°	174.4	181.0	187.6	189.2	204.4	224.8	235.0	250.7	282.1	305.5	309.3
142.5°	179.2	185.3	191.3	192.8	206.9	225.6	235.0	248.8	276.3	296.9	300.1
145°	186.5	191.7	197.0	198.4	210.1	225.7	233.5	244.7	267.2	284.1	286.5
147.5°	193.8	199.0	204.0	205.4	214.8	227.2	233.5	242.3	260.0	273.3	275.4
150°	198.5	203.1	207.8	209.0	217.1	228.0	233.5	240.9	255.9	267.1	268.8
152.5°	203.4	207.0	210.5	211.4	218.8	228.5	233.5	239.9	252.6	262.2	263.4
155°	210.7	213.4	216.0	216.6	222.2	229.7	233.5	238.5	248.7	256.3	257.2
157.5°	216.1	218.7	221.2	221.8	225.7	230.8	233.5	237.4	245.3	251.3	251.9
160°	219.8	221.8	223.8	224.2	227.3	231.4	233.5	236.9	243.6	248.7	249.0
162.5°	223.5	224.9	226.4	226.8	229.0	232.0	233.5	236.3	242.0	246.3	246.6
165°	227.5	228.8	230.2	230.5	231.5	232.8	233.5	235.5	239.5	242.6	242.9
167.5°	231.1	231.7	232.3	232.5	233.3	234.5	235.0	236.4	239.1	241.1	241.2
170°	233.5	234.1	234.7	234.8	234.9	235.0	235.0	236.4	239.1	241.1	241.1
172.5°	234.7	234.8	235.0	235.0	235.0	235.0	235.0	236.1	238.2	239.8	239.6
175°	236.5	236.5	236.5	236.5	236.0	235.3	235.0	235.7	237.1	238.1	238.1
177.5°	236.5	236.5	236.5	236.5	236.1	235.6	235.4	235.9	237.0	237.8	237.6
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	239.5	239.5
2.5°	255.6	254.1
5°	328.8	330.3
7.5°	442.8	442.0
10°	550.6	557.5
12.5°	629.1	630.6
15°	676.8	679.9
17.5°	695.3	696.1
20°	696.1	694.5
22.5°	687.6	686.1
25°	677.6	676.8
27.5°	668.4	669.1
30°	664.5	666.8
32.5°	664.5	668.4
35°	666.1	669.9
37.5°	665.3	669.9
40°	662.2	667.6
42.5°	653.7	657.6
45°	640.6	645.3
47.5°	623.7	626.8
50°	602.1	605.2
52.5°	575.2	576.0
55°	542.8	545.9
57.5°	508.2	509.0
60°	469.7	472.0
62.5°	428.9	428.9
65°	385.8	387.3
67.5°	341.1	345.0
70°	295.7	296.4
72.5°	251.0	251.0
75°	204.8	205.6
77.5°	160.9	160.9
80°	119.4	120.1
82.5°	82.4	83.9
85°	51.6	51.6
87.5°	23.9	21.6
90°	6.0	6.0
92.5°	24.2	19.3
95°	84.2	69.7
97.5°	201.7	174.1
100°	290.7	257.7
102.5°	378.1	350.0
105°	489.7	474.6
107.5°	562.7	566.4
110°	590.6	606.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	593.1	617.4
115°	577.3	611.0
117.5°	544.0	581.4
120°	517.1	553.4
122.5°	491.0	526.8
125°	453.6	486.6
127.5°	420.0	447.8
130°	400.3	426.0
132.5°	382.3	405.3
135°	357.7	377.5
137.5°	338.0	354.2
140°	324.5	339.6
142.5°	313.2	326.3
145°	296.4	306.3
147.5°	283.5	291.7
150°	275.4	282.1
152.5°	268.4	273.4
155°	260.5	263.8
157.5°	254.2	256.5
160°	250.4	251.7
162.5°	247.9	249.2
165°	244.3	245.7
167.5°	241.8	242.3
170°	241.1	241.1
172.5°	239.2	238.7
175°	238.1	238.1
177.5°	237.1	236.5
180°	236.5	236.5



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	4.18	5.13	5.09	6.06	7.26	17.33	18.27	18.23	19.21	20.40
	3H	4.90	5.75	5.81	6.69	7.91	19.16	20.01	20.07	20.95	22.17
	4H	5.20	6.01	6.13	6.95	8.19	19.79	20.60	20.73	21.55	22.78
	6H	5.46	6.20	6.40	7.15	8.40	20.22	20.96	21.16	21.92	23.16
	8H	5.53	6.24	6.48	7.21	8.45	20.33	21.05	21.29	22.02	23.26
	12H	5.55	6.23	6.51	7.19	8.46	20.40	21.08	21.36	22.04	23.31
4H	2H	11.39	12.20	12.33	13.14	14.37	17.61	18.42	18.55	19.37	20.60
	3H	12.97	13.64	13.91	14.62	15.87	19.65	20.33	20.60	21.30	22.55
	4H	13.06	13.68	14.02	14.65	15.93	20.41	21.03	21.37	22.00	23.27
	6H	13.08	13.62	14.05	14.61	15.88	20.94	21.48	21.91	22.47	23.74
	8H	13.06	13.56	14.04	14.55	15.83	21.10	21.60	22.07	22.59	23.87
	12H	13.02	13.47	14.02	14.48	15.77	21.19	21.64	22.18	22.65	23.94
8H	4H	14.51	15.01	15.48	16.00	17.28	20.48	20.98	21.45	21.97	23.25
	6H	14.75	15.17	15.75	16.20	17.48	21.10	21.52	22.10	22.54	23.83
	8H	14.77	15.14	15.78	16.16	17.46	21.31	21.68	22.32	22.70	24.00
	12H	14.75	15.07	15.76	16.08	17.43	21.45	21.78	22.47	22.79	24.13
12H	4H	14.65	15.10	15.65	16.11	17.40	20.44	20.89	21.43	21.89	23.18
	6H	15.01	15.38	16.02	16.39	17.69	21.08	21.45	22.09	22.47	23.77
	8H	15.08	15.41	16.10	16.42	17.76	21.31	21.63	22.33	22.65	23.99